

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A substantially pure polypeptide comprising
a fully human monoclonal antibody or a humanized chimpanzee monoclonal antibody that binds or neutralizes dengue type 1, 2, 3, and/or 4 virus,
wherein said antibody includes a heavy chain CDR3 region having the amino acid sequence of SEQ ID NO: 7, 23, 39, 55, 71, 87, 103, 119, 135, 151, 167, or 183
~~or comprising~~
~~a monoclonal antibody that binds the antigen to which monoclonal antibody 5H2 binds, wherein said antibody 5H2 is produced by a plasmid deposited with the ATCC under Accession No. PTA-5662.~~
~~or comprising~~
~~a monoclonal antibody that binds the antigen to which monoclonal antibody 1A5 binds wherein said antibody 1A5 is produced by a plasmid deposited with the ATCC under Accession No. PTA-6265.~~
2. (Currently Amended) The substantially pure polypeptide of Claim 1 wherein said antibody ~~fragment~~ comprises an Fd fragment.
3. (Currently Amended) The substantially pure polypeptide of Claim 1 wherein said antibody ~~fragment~~ comprises an Fab fragment.
4. (Currently Amended) The substantially pure polypeptide of Claim 1 wherein said antibody includes a heavy chain CDR3 region having the amino acid sequence of SEQ ID NO: 7, ~~23, 39, 55, 71, 87, 103, 119, 135, 151, 167, or 183.~~
5. (Currently Amended) The substantially pure polypeptide of Claim ~~[[4]]~~ 1 wherein said antibody includes a heavy chain CDR2 region having the amino acid sequence of SEQ ID NO: 5 (when heavy chain CDR3 region is SEQ ID NO: 7), 21 (when heavy chain CDR3 region is SEQ ID NO: 23), 37 (when heavy chain CDR3 region is SEQ ID NO: 39), 53 (when heavy chain CDR3 region is SEQ ID NO: 55), 69 (when heavy chain CDR3 region is SEQ ID NO: 71), 85 (when heavy chain CDR3 region is SEQ ID NO: 87), 101 (when heavy chain CDR3 region is SEQ ID NO: 103), 117 (when heavy chain CDR3 region is SEQ ID NO: 119), 133 (when heavy chain CDR3 region is SEQ ID NO: 135), 149 (when heavy chain CDR3 region is SEQ ID NO:

151), 165 (when heavy chain CDR3 region is SEQ ID NO: 167), or 181 (when heavy chain CDR3 region is SEQ ID NO: 183).

6. (Original) The substantially pure polypeptide of Claim 5 wherein said antibody includes a heavy chain CDR1 region having the amino acid sequence of SEQ ID NO: 3 (when heavy chain CDR3 region is SEQ ID NO: 7), 19 (when heavy chain CDR3 region is SEQ ID NO: 23), 35 (when heavy chain CDR3 region is SEQ ID NO: 39), 51 (when heavy chain CDR3 region is SEQ ID NO: 55), 67 (when heavy chain CDR3 region is SEQ ID NO: 71), 83 (when heavy chain CDR3 region is SEQ ID NO: 87), 99 (when heavy chain CDR3 region is SEQ ID NO: 103), 115 (when heavy chain CDR3 region is SEQ ID NO: 119), 131 (when heavy chain CDR3 region is SEQ ID NO: 135), 147 (when heavy chain CDR3 region is SEQ ID NO: 151), 163 (when heavy chain CDR3 region is SEQ ID NO: 167), or 179 (when heavy chain CDR3 region is SEQ ID NO: 183).

7. (Currently Amended) The substantially pure polypeptide of Claim [[4]] 1 wherein said antibody includes a heavy chain Fd region including the amino acid sequence of SEQ ID NO: 1 (when heavy chain CDR3 region is SEQ ID NO: 7), 17 (when heavy chain CDR3 region is SEQ ID NO: 23), 33 (when heavy chain CDR3 region is SEQ ID NO: 39), 49 (when heavy chain CDR3 region is SEQ ID NO: 55), 65 (when heavy chain CDR3 region is SEQ ID NO: 71), 81 (when heavy chain CDR3 region is SEQ ID NO: 87), 97 (when heavy chain CDR3 region is SEQ ID NO: 103), 113 (when heavy chain CDR3 region is SEQ ID NO: 119), 129 (when heavy chain CDR3 region is SEQ ID NO: 135), 145 (when heavy chain CDR3 region is SEQ ID NO: 151), 161 (when heavy chain CDR3 region is SEQ ID NO: 167), or 177 (when heavy chain CDR3 region is SEQ ID NO: 183).

8. (Currently Amended) The substantially pure polypeptide of Claim [[4]] 1 wherein said antibody includes a light chain CDR3 region having the amino acid sequence of SEQ ID NO: 15 (when heavy chain CDR3 region is SEQ ID NO: 7), 31 (when heavy chain CDR3 region is SEQ ID NO: 23), 47 (when heavy chain CDR3 region is SEQ ID NO: 39), 63 (when heavy chain CDR3 region is SEQ ID NO: 55), 79 (when heavy chain CDR3 region is SEQ ID NO: 71), 95 (when heavy chain CDR3 region is SEQ ID NO: 87), 111 (when heavy chain CDR3 region is SEQ ID NO: 103), 127 (when heavy chain CDR3 region is SEQ ID NO: 119), 143 (when heavy chain CDR3 region is SEQ ID NO: 135), 159 (when heavy chain CDR3 region is SEQ ID NO:

151), 175 (when heavy chain CDR3 region is SEQ ID NO: 167), or 191 (when heavy chain CDR3 region is SEQ ID NO: 183).

9. (Original) The substantially pure polypeptide of Claim 8 wherein said antibody includes a light chain CDR2 region having the amino acid sequence of SEQ ID NO: 13 (when heavy chain CDR3 region is SEQ ID NO: 7), 29 (when heavy chain CDR3 region is SEQ ID NO: 23), 45 (when heavy chain CDR3 region is SEQ ID NO: 39), 61 (when heavy chain CDR3 region is SEQ ID NO: 55), 77 (when heavy chain CDR3 region is SEQ ID NO: 71), 93 (when heavy chain CDR3 region is SEQ ID NO: 87), 109 (when heavy chain CDR3 region is SEQ ID NO: 103), 125 (when heavy chain CDR3 region is SEQ ID NO: 119), 141 (when heavy chain CDR3 region is SEQ ID NO: 135), 157 (when heavy chain CDR3 region is SEQ ID NO: 151), 173 (when heavy chain CDR3 region is SEQ ID NO: 167), or 189 (when heavy chain CDR3 region is SEQ ID NO: 183).

10. (Original) The substantially pure polypeptide of Claim 9 wherein said antibody includes a light chain CDR1 region having the amino acid sequence of SEQ ID NO: 11 (when heavy chain CDR3 region is SEQ ID NO: 7), 27 (when heavy chain CDR3 region is SEQ ID NO: 23), 43 (when heavy chain CDR3 region is SEQ ID NO: 39), 59 (when heavy chain CDR3 region is SEQ ID NO: 55), 75 (when heavy chain CDR3 region is SEQ ID NO: 71), 91 (when heavy chain CDR3 region is SEQ ID NO: 87), 107 (when heavy chain CDR3 region is SEQ ID NO: 103), 123 (when heavy chain CDR3 region is SEQ ID NO: 119), 139 (when heavy chain CDR3 region is SEQ ID NO: 135), 155 (when heavy chain CDR3 region is SEQ ID NO: 151), 171 (when heavy chain CDR3 region is SEQ ID NO: 167), or 187 (when heavy chain CDR3 region is SEQ ID NO: 183).

11. (Currently Amended) The substantially pure polypeptide of Claim [[4]] 1 wherein said antibody includes a light chain region including the amino acid sequence of SEQ ID NO: 9 (when heavy chain CDR3 region is SEQ ID NO: 7), 25 (when heavy chain CDR3 region is SEQ ID NO: 23), 41 (when heavy chain CDR3 region is SEQ ID NO: 39), 57 (when heavy chain CDR3 region is SEQ ID NO: 55), 73 (when heavy chain CDR3 region is SEQ ID NO: 71), 89 (when heavy chain CDR3 region is SEQ ID NO: 87), 105 (when heavy chain CDR3 region is SEQ ID NO: 103), 121 (when heavy chain CDR3 region is SEQ ID NO: 119), 137 (when heavy chain CDR3 region is SEQ ID NO: 135), 153 (when heavy chain CDR3 region is SEQ ID NO:

151), 169 (when heavy chain CDR3 region is SEQ ID NO: 167), or 185 (when heavy chain CDR3 region is SEQ ID NO: 183).

12. (Currently Amended) The substantially pure polypeptide of Claim ~~[[[4]]~~ 1 wherein said antibody includes a heavy chain Fd region including the CDR amino acid sequences of SEQ ID NOS: ~~4~~ 3 and 5 (when heavy chain CDR3 region is SEQ ID NO: 7), ~~47~~ 19 and 21 (when heavy chain CDR3 region is SEQ ID NO: 23), ~~33~~ 35 and 37 (when heavy chain CDR3 region is SEQ ID NO: 39), ~~49~~ 51 and 53 (when heavy chain CDR3 region is SEQ ID NO: 55), ~~65~~ 67 and 69 (when heavy chain CDR3 region is SEQ ID NO: 71), ~~84~~ 83 and 85 (when heavy chain CDR3 region is SEQ ID NO: 87), ~~97~~ 99 and 101 (when heavy chain CDR3 region is SEQ ID NO: 103), ~~143~~ 115 and 117 (when heavy chain CDR3 region is SEQ ID NO: 119), ~~129~~ 131 and 133 (when heavy chain CDR3 region is SEQ ID NO: 135), ~~145~~ 147 and 149 (when heavy chain CDR3 region is SEQ ID NO: 151), ~~164~~ 163 and 165 (when heavy chain CDR3 region is SEQ ID NO: 167), or ~~177~~ 179 and 181 (when heavy chain CDR3 region is SEQ ID NO: 183).

13. (Currently Amended) The substantially pure polypeptide of Claim 12 wherein said antibody includes a light chain region including the CDR amino acid sequences of SEQ ID NOS: 9 11 and 13 (when heavy chain CDR3 region is SEQ ID NO: 7), ~~25~~ 27 and 29 (when heavy chain CDR3 region is SEQ ID NO: 23), ~~44~~ 43 and 45 (when heavy chain CDR3 region is SEQ ID NO: 39), ~~57~~ 59 and 61 (when heavy chain CDR3 region is SEQ ID NO: 55), ~~73~~ 75 and 77 (when heavy chain CDR3 region is SEQ ID NO: 71), ~~89~~ 91 and 93 (when heavy chain CDR3 region is SEQ ID NO: 87), ~~105~~ 107 and 109 (when heavy chain CDR3 region is SEQ ID NO: 103), ~~124~~ 123 and 125 (when heavy chain CDR3 region is SEQ ID NO: 119), ~~137~~ 139 and 141 (when heavy chain CDR3 region is SEQ ID NO: 135), ~~153~~ 155 and 157 (when heavy chain CDR3 region is SEQ ID NO: 151), ~~169~~ 171 and 173 (when heavy chain CDR3 region is SEQ ID NO: 167), or ~~185~~ 187 and 189 (when heavy chain CDR3 region is SEQ ID NO: 183).

14. (Original) An isolated nucleic acid comprising a nucleotide sequence encoding a polypeptide selected from the group consisting of the polypeptide of Claim 1, the polypeptide of Claim 2, the polypeptide of Claim 3, the polypeptide of Claim 4, the polypeptide of Claim 5, the polypeptide of Claim 6, the polypeptide of Claim 7, the polypeptide of Claim 8, the polypeptide of Claim 9, the polypeptide of Claim 10, the polypeptide of Claim 11, the polypeptide of Claim 12, and the polypeptide of Claim 13.

15. (Original) An isolated nucleic acid as in Claim 14, wherein said nucleic acid comprises a vector including a regulatory sequence operably joined to said nucleic acid.
16. (Original) A host cell including a vector comprising a nucleic acid of Claim 14.
17. (Original) A pharmaceutical preparation comprising
a pharmaceutically acceptable carrier; and
a substantially pure polypeptide selected from the group consisting of the polypeptide of Claim 1, the polypeptide of Claim 2, the polypeptide of Claim 3, the polypeptide of Claim 4, the polypeptide of Claim 5, the polypeptide of Claim 6, the polypeptide of Claim 7, the polypeptide of Claim 8, the polypeptide of Claim 9, the polypeptide of Claim 10, the polypeptide of Claim 11, the polypeptide of Claim 12, and the polypeptide of Claim 13.
18. (Original) A diagnostic preparation comprising
a pharmaceutically acceptable carrier; and
a substantially pure polypeptide selected from the group consisting of the polypeptide of Claim 1, the polypeptide of Claim 2, the polypeptide of Claim 3, the polypeptide of Claim 4, the polypeptide of Claim 5, the polypeptide of Claim 6, the polypeptide of Claim 7, the polypeptide of Claim 8, the polypeptide of Claim 9, the polypeptide of Claim 10, the polypeptide of Claim 11, the polypeptide of Claim 12, and the polypeptide of Claim 13.
19. (Original) A method for the treatment of dengue virus disease comprising administering to a patient a therapeutically effective amount of the pharmaceutical preparation of Claim 17.
20. (Original) A method for prophylaxis against dengue virus disease comprising administering to a patient a prophylactically effective amount of the pharmaceutical preparation of Claim 17.
21. (Original) A method for the diagnosis of dengue virus disease comprising
administering to a patient an effective amount of the diagnostic preparation of Claim 18, and
detecting binding of the substantially pure polypeptide as a determination of the presence of dengue virus disease.

22. (Original) A method of detecting the presence of dengue virus in a biological sample comprising

contacting said sample with the diagnostic preparation of Claim 18, and
assaying binding of the substantially pure polypeptide as a determination of the presence of said dengue virus.

23. (Original) Humanized IgG1 5H2 plasmid deposited with ATCC as ATCC Accession No. PTA-5662.

24. (Withdrawn) Humanized IgG1 1A5 plasmid deposited with ATCC as ATCC Accession No. PTA-6265.

25. (Cancelled).

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Currently Amended) ~~The isolated monoclonal antibody of Claim 26;~~ An isolated humanized chimpanzee monoclonal antibody that neutralizes dengue virus, wherein said antibody is produced by a plasmid having ATCC Accession No. PTA-5662.

33. (Currently Amended, Withdrawn) ~~The isolated monoclonal antibody of Claim 26;~~ An isolated humanized chimpanzee monoclonal antibody that neutralizes dengue virus, wherein said antibody is produced by a plasmid having ATCC Accession No. PTA-6265.

34. (New) A substantially pure antibody comprising

SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 11, SEQ ID NO: 13,
and SEQ ID NO: 15.